REMARKS

By the Office Action dated July 23, 2007, all of pending claims 1-20 have been rejected. In particular, claims 1-10 and 13-20 have been rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,101,924 to Yamagiwa et al. ("Yamagiwa"). Dependent claim 11 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Yamagiwa in view of U.S. Patent No. 6,633,800 to Ward et al. ("Ward") and claim 12 has been rejected under 35 U.S.C. 103(a) based on official notice of the claimed subject matter. Claim 1 has been amended to include the features of claim 2 (now canceled) and claims 1, 10, 13, and 17 have been amended to correct editorial errors. For reasons described in greater detail herein, all of the claims as amended are patentable in view of the prior art of record.

Applicant respectfully requests receipt of a Form PTO-892 that lists Ward as a reference considered by the Office, same having been omitted from the Form PTO-892 submitted with this Office Action.

Yamagiwa is substantially different from the vehicles and methods claimed in the present application. As with many other known vehicles and methods, Yamagiwa is primarily concerned with cooling the motor to improve performance. To that end, a number of cooling elements (namely, cooling fins 40 and cooling fans 53 and 74) are arranged coaxially with the drive shaft 50 of the motor 30. Notably, as illustrated in Fig. 2 of Yamagiwa:

- none of these cooling elements is operable independently of the transmission 31,
- none of these cooling elements is in fluid-passing relationship to an inlet of the transmission case 28 that is

positioned along the peripheral wall of the transmission case, and

- none of these cooling elements is arranged to impel air longitudinally through the transmission case 28.

Furthermore, it will be seen that the air inlet (vent 49) associated with the transmission case 28 merely comprises an opening in the partitioning wall 48 between the motor housing 27 and the transmission case 28, so:

- the transmission case 28 does not include an inlet positioned along its peripheral wall,
- the transmission case 28, inlet 49, and discharge port 55 do not define a generally longitudinal enclosed air flow path between the inlet 49 and the discharge port 55,
- the inlet 49 and discharge port 55 are not at generally opposing end portions of the transmission case 28,
- the inlet 49 is not disposed at the upstream portion of the transmission case 28, and
- the inlet 49 is not arranged so as to allow air to be impelled into the transmission case 28 at an acute angle with respect to the plane in which the transmission belt 69 rotates.

As a result of these numerous differences, it is clear that Yamagiwa is directed to a cooling system that functions substantially differently from the positive air flow drive train unit according to the present invention. The various cooling elements of Yamagiwa cool the motor 30 and/or the portions of the transmission 31 that are coaxial with the drive shaft 50, but provide no directed air flow to the remainder of the transmission and provide no assurance of positive pressure along the seams of the transmission case 28. Instead, as described at lines 9-32 of column 12 of Yamagiwa, the cooling system is

provided for purposes of cooling the motor 30 and increasing drive efficiency, with the resultant air exiting the discharge outlet 30 as a byproduct of cooling the motor 30 and the region of the transmission 31 coaxial with the drive shaft 50, rather than as part of a system that has the goal or effect of pressurizing the transmission case 28.

Turning now to the independent claims, claim 1 recites, among other things, that both the inlet and outlet to the transmission housing are disposed at positions along the peripheral wall of the transmission housing. The specification of the present application, at paragraph [0025], describes that the peripheral wall 64 is the surface that spans between the cover weldment 60 and the base plate weldment 62 (see also Fig. 6). In contrast to an inlet disposed at a position along such a spanning surface, the inlet 49 of Yamagiwa is disposed in the partitioning wall 48 between the motor housing 27 and the transmission case 28, which wall 48 corresponds to the base plate weldment 62 instead of the peripheral wall. This is a significant distinction, because the Yamagiwa inlet 49 merely serves as a vent for the air used to cool the motor 30, whereas the inlet of claim 1 is positioned along the partitioning wall to effectively pressurize the transmission housing and has no cooling effect on the motor. Indeed, it is imperative that air flows along the drive shaft of Yamagiwa, so the most logical venting location is at the partitioning wall and it is unclear how or why one would modify Yamagiwa to simultaneously cool the motor and introduce air through the peripheral wall of the transmission case. Accordingly, it is respectfully submitted that claim 1 is not anticipated by nor a non-obvious variation

of the system described in Yamagiwa and that the claims dependent therefrom are allowable for similar reasons.

As for independent claim 13, it recites, among other things, that the inlet is positioned at an upstream portion of the transmission housing and the outlet is positioned at a downstream portion so as to develop air flow in a generally longitudinal direction therebetween. As discussed above, the inlet 49 of Yamagiwa is disposed in the partitioning wall 48 between the motor housing 49 and the transmission case 28, so the air must flow laterally (i.e., coaxially with the drive shaft 50), then turn 90° before flowing longitudinally to the discharge port 55. Hence, while the claimed inlet works in combination with the associated fan unit to develop longitudinal air flow, the inlet 49 and cooling elements of Yamagiwa develop lateral air flow and must rely on the configuration of the transmission case to direct any of the air longitudinally. This difference in the initial air flow direction affects the pressure that is ultimately developed in the transmission housing, with the longitudinal flow arrangement of the present invention providing a more secure housing interior. Furthermore, for reasons similar to those described above with regard to claim 1, it is unclear how or why one of ordinary skill in the art would have modified Yamagiwa to arrive at the claimed configuration. Accordingly, it is respectfully submitted that claim 13 is not anticipated by nor a non-obvious variation of the system described in Yamagiwa and that the claims dependent therefrom are allowable for similar reasons.

As for independent claim 18, it is directed to a method that includes, among other things, "impelling air into said [transmission] housing through the inlet in a direction disposed

at an acute angle with respect to said plane [in which the belt of the transmission rotates] . . ." Clearly, the cooling elements of Yamagiwa impel air into the transmission case in a direction perpendicular to the plane in which the belt 69 rotates. The purpose of the cooling elements of Yamagiwa is to cool the motor and the region of the transmission coaxial with the drive shaft, so it is critical that they are configured to direct air along a path coaxial with the drive shaft. This difference in the air flow direction is indicative of the substantial difference between the method employed by Yamagiwa (which functions to cool the motor) and the method employed by the present invention (which functions to create positive pressure within the transmission housing). Furthermore, for reasons similar to those described above with regard to claim 1, it is unclear how or why one of ordinary skill in the art would have modified Yamagiwa to arrive at the claimed method. Accordingly, it is respectfully submitted that claim 18 is not anticipated by nor a non-obvious variation of the method employed in Yamagiwa and that the claims dependent therefrom are allowable for similar reasons.

In addition to the reasons described above with regard to the independent claim from which they directly or indirectly depend, the dependent claims of the present application are also separately distinguishable from Yamagiwa. For example, claims 10 and 17 each recite a fan unit that is powered by a power line to allow operation of the fan unit independently of the transmission components. In contrast, all of the cooling elements of Yamagiwa are driven by the drive train components, so they cannot operate independently. The passage identified in the Office Action as providing a basis for rejecting claims 10

and 17 (lines 25-32 of column 6) describe a power supply wire cord connected to the motor. Accordingly, the power supply wire cord does not operate independently of the transmission components, but is used to provide power thereto.

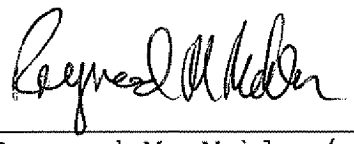
As for dependent claim 11, it has been rejected under 35 U.S.C. 103(a) as being unpatentable over Yamagiwa in view of Ward. Claim 11 is dependent from claim 10, which is in turn dependent from claim 1, both of which are separately distinguishable from the prior art for reasons described above. Ward further recites an oil pressure monitoring unit which is operatively coupled to the power line that provides power to the fan unit. As stated above, Yamagiwa fails to describe or suggest a fan unit that is powered by a source that operates independently of the transmission components, and Ward similarly fails to describe or suggest such a system. Ward merely describes a mining vehicle with an oil pressure monitoring device that is connected to a power source. Hence, to arrive at the claimed combination using Yamagiwa and Ward, one would have to first conceive of an independently operating fan unit, then look to the mining vehicle field to find a powered oil pressure monitoring unit, and then decide to tie the operation of the fan unit to the oil pressure monitoring unit. While applicant acknowledges that the Supreme Court's KSR International Co. v. Teleflex Inc. decision may have somewhat loosened the prohibition on hindsight bias, it is clear that the process required to arrive at the subject matter of claim 11 can only be made possible by using the present application as a roadmap. Accordingly, in addition to being patentable on account of its dependence from claims 1 and 10, claim 11 is separately distinguishable from the prior art.

CONCLUSION

For the above reasons, it is respectfully submitted that all of the remaining claims are in condition for allowance. Accordingly, reconsideration and allowance are respectfully requested.

Additionally, it is noted that Ward is not identified in the Examiner's Notice of References Cited (form PTO-892), so it is respectfully requested that a supplemental form PTO-892 be filed to make record of the Examiner's consideration of Ward.

Respectfully submitted,

Date: October 18, 2007 By: 

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